

## AMENDMENTS TO THE CLAIMS

1-12. (Canceled)

13. (Currently amended) A method of detecting excessive apoptosis in a subject, comprising:

preparing a blood sample from the subject;  
~~from which cells have been removed~~ removing cells from the sample; and  
reacting the sample with an antibody that binds specifically to nucleolin, ~~to detect apoptotic bodies in the blood sample; and~~  
~~detecting the binding of the antibody to nucleolin in apoptotic bodies of the sample is indicative of excessive apoptosis in the subject~~  
~~wherein detecting high levels of nucleolin correlates with excessive apoptosis.~~

14. (Original) The method of claim 13, wherein the subject is suspected of having a disease selected from the group consisting of Acquired Immunodeficiency Syndrome, a neurodegenerative disease, an ischemic injury, an autoimmune disease, a tumor, a cancer, a viral infection, an acute inflammatory condition and sepsis.

15. (Original) The method of claim 13, wherein the subject is suspected of having cancer.

16. (Original) The method of claim 15, wherein the cancer is selected from the group consisting of endocervical adenocarcinoma, prostatic carcinoma, breast cancer, leukemia and non-small cell lung carcinoma.

17-42. (Canceled.)

43. (Previously presented) The method of claim 13, wherein the blood sample comprises serum or plasma.

44. (Currently amended) The method of claim 13, wherein the preparing step further comprises disrupting the apoptotic bodies.

45. (Canceled)

46. (Currently amended) The method of claim 13, wherein the antibody comprises is an anti-nucleolin monoclonal antibody.

47. (Currently amended) The method of claim 13, wherein the antibody comprises is an anti-nucleolin polyclonal antibody.

48-50. (Canceled)

51. (Currently amended) A method of detecting excessive apoptosis in a subject, comprising:

preparing a blood sample from the subject; which cells have been removed; and

removing cells from the sample;

reacting the sample with an antibody that binds specifically to poly(ADP-ribose) polymerase (PARP-1), to detect apoptotic bodies in the blood sample; and

detecting the binding of the antibody to PARP-1 in apoptotic bodies of the sample is indicative of excessive apoptosis in the subject

wherein detecting high levels of PARP-1 correlates with excessive apoptosis.

52. (Previously presented) The method of claim 51, wherein the subject is suspected of having a disease selected from the group consisting of Acquired Immunodeficiency Syndrome, a neurodegenerative disease, an ischemic injury, an autoimmune disease, a tumor, a cancer, a viral infection, an acute inflammatory condition and sepsis.

53. (Previously presented) The method of claim 51, wherein the subject is suspected of having cancer.

54. (Previously presented) The method of claim 51, wherein the cancer is selected from the group consisting of endocervical adenocarcinoma, prostatic carcinoma, breast cancer, leukemia and non-small cell lung carcinoma.

55. (Previously presented) The method of claim 51, wherein the blood sample comprises serum or plasma.

56. (Currently amended) The method of claim 51, wherein the preparing step further comprises disrupting the apoptotic bodies.

57. (Currently amended) The method of claim 51, wherein the antibody comprises is an anti-PARP-1 monoclonal antibody.

58. (Currently amended) The method of claim 51, wherein the antibody comprises is an anti-PARP-1 polyclonal antibody.

59. (Previously presented) The method of claim 13, wherein the subject is a mammal.

60. (Previously presented) The method of claim 13, wherein the subject is a human.

61. (Previously presented) The method of claim 51, wherein the subject is a mammal.

62. (Previously presented) The method of claim 51, wherein the subject is a human.